

5660

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

FEB 25 1935

Acc. No.

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: CALIFORNIA

DESCRIPTIVE REPORT

~~Topographic~~

Hydrographic

Sheet No. SB-22

5660

LOCALITY

Santa Cruz Island

(Eastern end) Part

1935

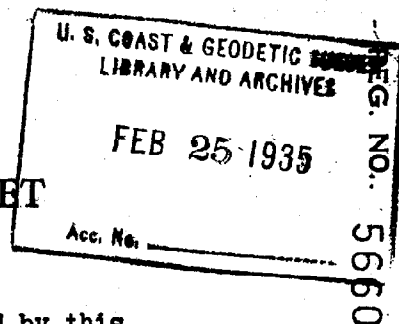
CHIEF OF PARTY

Capt. K. Green

5660

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET



The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 22

REGISTER NO. 5660

State California
General locality Santa Cruz Island *Santa Cruz*
Locality Eastern Part ~~East end~~
Scale 1-20,000 Date of survey Jan-Sept, 1934
Vessel chartered launch Virginia
Chief of Party Chas K. Green
Surveyed by Harry T. Kelsh
Protracted by D. V. Radcliffe
Soundings penciled by A. J. Vollmar
Soundings in fathoms ~~feet~~
Plane of reference MLLW
Subdivision of wire dragged areas by
Inked by
Verified by
Instructions dated Oct. 31, 1932 and Sept 9, 1933, 19
Remarks:

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET FIELD NO° 22
Santa Cruz Id.-----E. End.

INSTRUCTIONS

October 31, 1932 and Sept. 9, 1933 ✓

LIMITS AND SCALE

This sheet embraces the inshore hydrography around the east end of Santa Cruz Island, from Chinese Harbor on the north side, to Pedro Pt. at the east end; and from Pedro Pt. around to Signal Train (119-36 W) on the south side of the island. It joins with sheets 23 and 53 on the north side and sheet 21 on the south, and on the east side joins the Anacapa work of 1933 (sheet 21) ✓

The scale is 1-20,000 ✓

GENERAL DESCRIPTION

The shoreline on the north side of the island going from Pedro Pt. west is a vertical cliff with deep water at the base. This cliff line is broken at Scorpion Bay (called East End Anchorage on old survey) beyond which point the cliffs become gradually higher, reaching a maximum of 700 ft at Cochie Pt. Even in Potatoes Harbor, just east of Cochie Pt. there is no beach (except at the extreme head of the bay). West of Cochie Pt. however the shoreline swings in an arc to the southward to form Chinese Harbor, and here we find a narrow gravel beach at the foot of the cliffs and hills, and the water deepens in a uniform slope offshore. ✓

The east shore from Pedro Pt. consists of a line of low cliffs for a mile and then a mile of gravel beach in the bight known as Smugglers Cove. South of this high cliffs with a narrow stretch of boulder beach continue to the end of the sheet. ✓

SURVEY METHODS

A pulling boat was used for the inshore shallow water line, the remainder with launch using hand lead up to 15 fathoms and vertical cast, machine soundings above that. 3 point fixes on shore signals for location. Control was ample. ✓

Discrepancies

None.

DANGERS

3

There are no offshore dangers for general navigation. A rock with 5 ft of water on it lies 200 meters east of signal Rex. There is no indication of this in ordinary weather.

Along the north shore deep water runs right up to the cliffs. On the east side of the island the water depth quickly reaches 25-30 fathoms except for a square mile patch off Sandstone Pt where an average depth of 10 fathoms prevails, with irregular bottom. Beyond this patch the bottom drops off into deep water. ✓

ANCHORAGES

Chinese Harbor is the best anchorage for southeast weather, on the island ✓

Potatoe Harbor is available for small craft for S°E° weather. (This harbor is called Tyler Bay on the previous work; but is well known locally by the above name).

Scorpion Bay is a good anchorage for northwest wind. This is called East End Anchorage on the former work. The above name however is well known locally and is used and preferred by the owners of this portion of the island. *only fair*
ck. G.

In northwest weather most of the fishing boats anchor just south of Pedro Pt. off the small bight known locally as Hungryman's Gulch. This offers good protection from the sea. The wind however blows strongly over the clifftops; also the bottom is not good holding ground. ✓

Smugglers Cove just to the south of the above, is also used. The same conditions as to wind and bottom prevail. ✓

GEOGRAPHIC NAMES

With the exceptions noted above the present names on the chart are well established. The name San Pedro Pt. on chart 5202 is well established altho ordinarily shortened to Pedro Pt. ✓
Comparison with previous surveys

The depth curves compare favorably with the former work of 1875 sheet 1323 B and 1324 A. ✓

The 5 ft shoal 200 M. off signal Rex does not appear on the former work. ✓

Harry T. Kelsh
Harry T. Kelsh, Surveyor

ADDITIONAL NOTES:

A sunken rock which was located with only two cuts by the topographer, Lat. 34 - 02.85, Long. 119 - 35.82, is not mentioned in the sounding records. As this is near the entrance to Potato Bay it is recommended that a sunken rock be shown on the chart. ✓

A 13 fathom sounding, Lat. 33 - 59.10, Long. 119 - 32.94 lies outside of a 17 fathom sounding. ✓

RJS

STATISTICS

SHEET SB 22

Date 1934	Day letter	Volume	Statute miles of sounding	Number of soundings	Number of positions	Ship
Jan 30	A	1	5.8	34	20	Virginia
31	B	1	28.3	210	125	
Feb 1	C	1	22.0	260	123	
2	D	1	16.3	105	66	
16	E	1	7.5	66	27	
Apr 17	F	1	5.2	67	35	
27	H	2	7.7	79	31	
25	G	2	14.0	143	74	
May 4	J	2	13.8	262	82	
14	K	2	2.0	24	15	
15	L	2	19.5	262	114	
16	M	3	17.8	294	121	
18	N	3	19.8	314	139	
24	P	3	13.4	115	63	
June 7	Q	3	3.5	58	30	
19	R	3 & 4	15.5	171	109	
20	S	4	12.5	158	87	
21	T	4	20.5	271	129	
22	U	4	14.9	199	109	
July 20	V	5	1.5	44	25	
25	W	5	17.6	278	106	
26	X	5	4.5	47	29	
Aug 20	Y	5	12.0	100	47	
Sept 7	Z	5	9.2	105	44	
SUB TOTAL (Chas. K. Green)			304.8	3666	1750	
Sept 25	AA	5	12.8	289	93	Skiff Virginia
26	BB	6	15.1	340	107	
27	CC	6	5.1	177	40	
SUB TOTAL (R. W. Knox)			33.0	806	240	
TOTALS			337.8	4472	1990	

Hydro Sheet, Field #SB-22, and records have been inspected and approved by me. Field work was done under my occasional supervision and the office work under the direction of Lieut. Robert W. Knox.

Chas. K. Green
H. & G. Eng'r.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

~~Santa Barbara, California~~

~~February 20, 1935~~, 19__

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Robert W. Knox for C. E. Green Chief of Party.

[illegible]

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstuffs and like objects are not sufficiently permanent to chart.

To: H.M. Strong
From: C.F.M.

Survey No. H 5660

Date: Feb. 28, 1935 GEOGRAPHIC NAMES
CALIFORNIA

Chart No. 5202

Diagram No. 5202-2

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ...5660

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet	1990..
Number of positions checked	150..
Number of positions revised	Approx: 50
Number of soundings recorded	4472.
Number of soundings revised	many
Number of signals erroneously plotted or transferred

Date: ~~Apr~~ May 2

Verification by L. E. Ash

Time: 10 days 2 hrs

Review by R. J. Christman

Time: 15 1/4 hrs.

RCC

April 6, 1935

E

Division of Hydrography and Topography:

✓ Division of Charts: Att: Mr. E. P. Ellis

Tide Reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 5660

Locality Santa Cruz Island, Eastern Part, Southern California Coast

Chief of Party: Chas. K. Green in 1934
Plane of reference is mean lower low water reading
3.5 ft. on tide staff at Prisoners Harbor
11.8 ft. below B.M. 1

Height of mean higher high water above plane of reference is 5.0 feet.

Condition of records satisfactory except as noted below:

Atty *Ham*
Chief, Division of Tides and Currents.

Report on sheet H-5660

Chief of Party C.K. Green

Surveyed in Jan. to Sept 1934

Surveyed by H.T. Melsh

Protracted by D.V. Radcliffe

Soundings plotted by - A.J. Vollmar

Verified and inked by L.E. Ash

1

In general the records conform very well with the general instructions with the exception that in very few cases is the geographic position of the beginning and end of lines recorded.

2

No difficulty was encountered in drawing the usual depth curves where they appear. Due to the rocky character of the shore parts of the ^{zero} one and two fathom curves do not appear

3

The field plotting was completed to the extent prescribed in the Hydro. Manual.

4

Many of the positions as well as the soundings were found to have been erroneously plotted. Practically all detached rocks along the shore, as ^{transferred} ~~taken~~ from the

topo sheet were found in error. These were removed and replotted in correct positions using identical symbols and notes as the topo sheet. (Per instructions of Mr Bush)

5

The junctions with ^{Completed} adjacent sheets are very satisfactory. Sheet H-5699 has not yet been verified, therefore no comparison was made

Respt. Submtd.

J. E. Ash

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5660 (1934)

Santa Cruz Island, Eastern Part, California

Surveyed in 1934

Instructions dated Oct. 31, 1932, and Sept. 9, 1933 (C. K. Green)

Hand Lead and Machine Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - C. K. Green.

Surveyed by - Harry T. Kelsh.

Protracted by - D. V. Radcliffe.

Soundings penciled by - A. J. Vollmar.

Verified and Inked by - L. E. Ash.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. Day letters are recorded with capital letters, but the majority of them are inked on the smooth sheet with lower case letters.
- b. Geographic positions of beginning and end of lines are given on only a very few days.
- c. Comparison with the topographic sheet (T-4885 of 1934) showed many of the rocks and small islets in error on the smooth sheet. The necessary corrections were accomplished.

The Descriptive Report is complete as to essential details and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The plan and extent of development are in accordance with the instructions for the project.

3. Sounding Line Crossings.

The agreement of depths at sounding line crossings is satisfactory.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn, including portions of the 1, 2, and 3 fathom curves.

5. Junction with Contemporary Surveys.

- a. Junction with H-5445 (1933) to the east is satisfactory.
- b. Junction with H-5661 (1934) off Prisoners Harbor on the north side of Santa Cruz Island is satisfactory.

- c. Junction with H-5699 (1934) on the south shore of Santa Cruz Island will be considered in the review of that sheet.
- d. Junction with H-5695 (1934) on the north side of Santa Cruz Island will be considered in the review of that sheet. New surveys to the north have not yet been received.

6. Comparison with Prior Surveys.

a. H-289 (1851).

This is a reconnaissance survey on a very small scale. All the information it contains has been replaced on the charts by later surveys.

b. H-501 (1855).

This survey shows the eastern end of Santa Cruz Island, scale 1-10,000. The soundings are rather openly spaced but the agreement in depth is good. Selected soundings and other important information was added to the later surveys. A combination of this survey and the surveys discussed under paragraph 6d is the basis for the present representation on the chart. The following changes in the inshore features are noted:

- (1) The small islet with two sunken rocks outside of it (charted in lat. $33^{\circ}59.8'$, long. $119^{\circ}33.25'$ is shown on the present survey as a rock awash bare 1 foot at LW. The symbol on H-501 (1855) probably was intended to indicate a ledge bare at low water. The present delineation should be used for charting.
- (2) The 5 foot sounding (charted $3/4$ fathom) in lat. $34^{\circ}00.35'$, long. $119^{\circ}32.77'$ falls just inshore of a sounding line on H-5660 (1934), showing depths of $1-1/4$ and $1-1/2$ fathoms and near the rocks awash along shore. Because the outlying danger in this vicinity is the $1/2$ fathom rock about 200 meters northeast of the above $3/4$ fathom, the delineation on the present survey should be used for charting.
- (3) The detached ledge or rock charted in lat. $34^{\circ}01.6'$, long. $119^{\circ}31.6'$ is part of the high water shoreline on the present survey. It may have been built up or more likely is only a different representation of the same feature. The 1934 survey should be accepted as the correct representation.

c. H-1045 (1869).

This survey is on scale 1-100,000. Only a few soundings fall within the area of the present survey and none of them need be retained. The general agreement in depth is good.

d. H-1323b (1875), H-1324a (1875), H-1324b (1875).

The first two of these surveys are on scale 1-20,000, the last (H-1324b) is a replotting of Chinese Harbor on scale 1-10,000. Depths are in good agreement with those shown on the present survey. Inshore details are generally in agreement. Because of the closer development these should be superseded by H-5660 (1934) for future charting.

7. Comparison with Chart No. 5126 and Chart No. 5202.

Within the area of the present survey the charts are based on surveys discussed in the foregoing paragraphs. No authority was found for the small rock or islet shown on chart 5202 off San Pedro Point (lat. 34°02', long. 119°31'). The rock is not shown on the larger scale chart (No. 5126) and a member of the survey party stated that it did not exist. It should be expunged from the chart.

8. Field Plotting.

A number of errors in protracting positions were found; many of the pencilled soundings had to be revised; and in general the field plotting was only fair, also see par. 1c.

9. Additional Field Work Recommended.

The survey is complete and satisfactory and no additional work is deemed necessary.

10. Superseding Old Surveys.

Within the area covered, the present survey supersedes the following surveys for charting purposes:

H- 289	(1851)	in part.
H- 501	(1855)	" "
H-1045	(1869)	" "
H-1323b	(1875)	" "
H-1324a	(1875)	" "
H-1324b	(1875)	" "

11. Reviewed by - R. J. Christman, May, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

K. T. Adams
Acting Chief, Division of Charts.

B. Border
Chief, Section of Field Work.

G. H. Hinde
Chief, Division of H. & T.

*Applied to Chart 5114 Dec 1935 - [Signature]
Applied to Chart 5115 Feb 1936 - [Signature]*

25 June 1936

applied to class 502 - Mar 1936
" " 5101 - May 1936

R.M. 3
R.M. 3-

EBB